

Remarks/Arguments:

Reconsideration and allowance of the above-identified application is respectfully requested. This amendment adds no new claims, and is provided to amend paragraphs [0020] and [0106], and Equations 20 and 21. No new matter has been added. Upon entry of this amendment, claims 1-16 will be pending.

Objections to the Specification

The Examiner has objected to the specification at paragraph 20 as lacking clarity regarding the element descriptions of Equation (1). For simplicity, all citations to the specification will refer to the paragraph numbers used in the application's Patent Application Publication, US 2004/0160360A1.

Specifically, the Examiner states that the variables x_p and y_p are positions and not velocities, and in previous office actions, has pointed to the following equations in the document entitled "Understanding GPS: Principles and Applications", by Elliot D. Kaplan, and similar equations in the document entitled "Global Positioning System: Theory and Applications" by Bradford Parkinson. The equations are:

$$x_p = r_k \cos u_k \text{ (to define In-plane x position); and}$$
$$y_p = r_k \sin u_k \text{ (to define In-plane y position).}$$

Accordingly, the Applicants have amended paragraph [0020] of the specification along the lines suggested by the Examiner. The Applicants have further deleted the reference to variable z_p in paragraph [0020] which does not exist in Equation 1. Therefore, the Applicants respectfully request the withdrawal of the objection to the specification.

Rejections of the Claims under 35 U.S.C. 112, First Paragraph

The Examiner has rejected claims 1-16 under 35 U.S.C. 112, first paragraph as failing to comply with the enablement requirement. The Examiner states that the

definition of "pseudo velocity" as defined in the application does not make physical sense.

The Applicants point the Examiners attention to the flow chart of FIG. 9, which specifies that the satellite velocity is determined using Equation 15 at step 915 (without regard to the velocity of the MS, but realizing a signal propagation delay occurs between the satellite and the MS) (see paragraph 105). The Applicants further point out that the pseudo velocity is determined using Equations 19 and 20 at step 920 (with regard to the velocity of the MS, that is, Equations 19 and 20 consider only a velocity component directed to the MS, or specifically, to the reference station) (see paragraph 106). This definition further conforms with paragraph 40 (see lines 19-24).

The Examiner has further stated that paragraph [0106] may support this definition, and has suggested that the Applicants more explicitly define the term "pseudo velocity" in paragraph [0106]. Accordingly, the Applicants have amended paragraph [0106] of the specification along the lines suggested by the Examiner.

Therefore, the Applicant respectfully requests the withdrawal of the rejection of independent claims 1 and 9, and respectfully requests the withdrawal of the rejection of dependent claims 2-8 and 10-16, which are dependent from the claims 1 and 9, respectively.

The Applicants have also amended Equations 20 and 21 to correct a typographical error. Specifically, the term $[[PRsv]]$ denoting pseudo range, has been replaced with $PVsv$ denoting pseudo velocity, and the term $[[RRsv]]$ denoting real range, has been replaced with $RVsv$ denoting real velocity. This is not new matter and is reflected in paragraph [0092] and [0093] which describes Equations 20 and 21.

The Examiner has also rejected claims 1-16 under 35 U.S.C. 112, first paragraph as failing to comply with the enablement requirement in regard to paragraphs [0019] and [0020]. The Examiner states that Equation 1 of paragraph [0019] and the variable definitions of paragraph [0020] do not make physical sense.

As noted above, the Applicants have amended paragraph [0020] of the specification along the lines suggested by the Examiner. The Applicants have further

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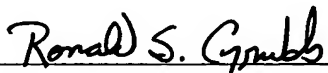
deleted the reference to variable z_p in paragraph [0020] which does not exist in Equation 1.

Therefore, the Applicants respectfully request the withdrawal of the rejection of independent claims 1 and 9, and respectfully request the withdrawal of the rejection of dependent claims 2-8 and 10-16, which are dependent from the claims 1 and 9, respectively.

Allowable Subject Matter and Conclusion

The Examiner is thanked for the allowable subject matter of claims 1-16. Further, in view of the above, it is believed that the application is in condition for allowance and notice to this effect is respectfully requested. Should the Examiner have any questions, the Examiner is invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,



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